

CLAIMS

1. A glass composition to be used for manufacturing inorganic fiber, containing SiO_2 by 52 to 72 wt%, Al_2O_3 by less than 3wt%, MgO by 0 to 7wt%, CaO by 7.5 to 9.5wt%, B_2O_3 by 0 to 12wt, BaO by 0 to 4wt%, SrO by 0 to 3.5wt%, Na_2O by 10 to 20.5wt%, K_2O by 0.5 to 4.0wt% and P_2O_5 by 0 to 5wt%.
2. The glass composition according to claim 1, containing B_2O_3 by 0.1 to 12wt%.
3. The glass composition according to claim 2, containing BaO by 0.1 to 4.0wt% and SrO by 0.1 to 3.5wt%.
4. The glass composition according to claim 3, containing P_2O_5 by 0.1 to 5wt%.
5. The glass composition according to claim 1, containing B_2O_3 by 0.1 to 12wt%, and having KI value of 40 or more, said KI value being obtained by formula
$$\text{KI} = (\text{Na}_2\text{O} + \text{K}_2\text{O} + \text{CaO} + \text{MgO} + \text{BaO} + \text{B}_2\text{O}_3) - 2 \times \text{Al}_2\text{O}_3,$$
where the molecular formulas represents the respective contents expressed by wt%.
6. The glass composition according to claim 1, containing BaO by 0.1 to 4wt%, SrO by 0.1 to 3.5wt%, but not containing B_2O_3 .
7. The glass composition according to one of claims 1-6, wherein raw material of the glass composition contains cathode ray tube glass and/or liquid crystal glass by 0 to 50wt%.
8. The glass composition according to one of claims 1-6, wherein raw material of the glass composition contains cathode ray tube glass and/or liquid crystal glass by 8 to 50wt%.
9. A method of manufacturing a molded product of inorganic fiber, comprising:

melting the glass composition according to one of claims 1-8 in a

melting furnace;

fining the molten glass composition into fine glass fiber in a fiberizing apparatus;

blowing an adhesive agent (binder) to the glass fiber to provide it with shape stability and load characteristics;

molding the glass fiber into the inorganic fiber molding having a predetermined density and a predetermined thickness by means of a fiber condenser and a dryer; and

subsequently cutting the molding to produce a finished product.

- 10.** A molded product of inorganic fiber manufactured by the method according to claim 9.